

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

Applicants wish to thank Examiners Geitz and Susan Lee for the courtesy of an interview on November 9, 2005. At that time applicants presented arguments traversing the combination of prior art applied against the claims in the outstanding Office Action. No agreement was reached at that time.

New Claims 13-16 respectively correspond to Claims 1 and 8-10, but further clarify that the passage of the base member has an opening area, as measured at an outlet of the base member adjacent to an inlet of said outlet member, larger than an opening area of the passage of the outlet member adjacent the shutter at a side of the shutter toward the outlet of the base member. Basis for this is evident from Figure 10. New dependent Claims 17-20 further recite that the shutter is cylindrical and is removably fitted in a transverse cylindrical shutter hole of the outlet member. Basis for this is found in Figure 12 which shows the cylindrical shutter 50 and the shutter hole 41 (see pp. 20-21).

Claims 1, 3-7 and 10-12 were rejected under 35 U.S.C. § 103 as being obvious over Welch et al in view of Terazawa et al, both of record, and further in view of the newly cited U.S. patent publication 2004/0011425 (Wegman et al). This rejection is respectfully traversed.

As was discussed during the interview, in a powder container provided with a shutter in the passage for delivering the powder from the powder storing body to an outlet thereof, a problem may arise due to the presence of the shutter. For example, the shutter should be as small as possible to minimize the risk that it can be moved by a finger, thereby causing leakage (page 21, lines 5-9). However, the small shutter size makes it more difficult to fill the powder storing body without spillage via the powder passage.

On the other hand, in accordance with the claimed invention, the shutter is provided in an outlet member that is selectively connectable to a base member, and the passage of the base member has an outlet whose opening area is larger than that of the passage in the outlet member adjacent the shutter. Accordingly, a small size shutter can be provided, but the outlet member can be disconnected from the base member to provide a relatively large passage area for refilling the body member (page 23, lines 5-19), after which the outlet member having the relatively small shutter can be replaced for dispensing the toner. The conflicting requirements of a small shutter and large passage area for refilling are thereby simultaneously accommodated.

Applicants had previously pointed out that Welch et al and Terazawa et al, which had been applied against the claims, fail to teach the aforementioned subject matter. For example, the valve 60 of Welch et al has a constant passage diameter throughout its length, and so the opening area of the passage at the outlet of the “base member” 62 of Welch et al cannot be larger than the opening area of the passage of the “outlet member” 64 adjacent the shutter or valve element 70. Terazawa et al was simply cited to teach forming a dispensing container from a flexible material, and so provided no teaching to overcome the aforementioned shortcoming of Welch et al. The Examiner has therefore now additionally cited Wegman et al to teach a housing portion of a toner filling apparatus in the shape of a funnel. The Examiner has asserted that it would have been obvious in view of Wegman et al to modify Welch et al in view of Terazawa et al “to include a central portion in the shape of a funnel” in order to achieve an “anti-drizzle” nozzle. However, this rejection is respectfully traversed for at least the following reasons:

1. Providing a funnel shaped passage in the valve member 60 of Welch et al would be contrary to the teachings thereof. The valve passage in Welch et al is cylindrical and has a constant diameter. A funnel shape may interfere with the opening and closing

action of the valve element. More significantly, it would reduce the sectional area of the passage, and so reduce the maximum flow rate of powder through the valve. This would be contrary to the object of Welch et al to provide “a dispensing system that can dispense powders at a suitably *high* dispensing rate” (column 2, lines 1-2). Welch et al thus *teaches away* from the invention. Since it would not be obvious to modify a prior art reference so as to render it unsatisfactory for its intended purpose (M.P.E.P. § 2143.01), such a modification of Welch et al would not have been obvious to one of ordinary skill in the art.

2. The purported motivation for the modification of Welch et al set forth in the Office Action, i.e., to provide an anti-drizzle nozzle, is not consistent with the teachings of Wegman et al. Wegman et al is directed to a filling apparatus for filling a container with a dry particulate material via a conduit 36. However, the shutter or valve in Wegman et al is not illustrated or described in detail (paragraph [0020]). Wegman et al also teaches that the dribble-free effect is achieved by using a post-cutoff vibrator, and not through the use of a funnel (paragraph [0002]; last sentence of paragraph [0008]; paragraph [0023]). While the anti-dribbling nozzle 34 is described as including a central portion 93 having a funnel shape (column [0021]), there is no description that this shape contributes to the anti-dribbling effect. Rather, the subsequent paragraphs [0022] and [0023] made clear that the anti-dribbling effect is achieved by the vibration of the nozzle. Thus, there is no evidence in the prior art that one skilled in the art would have been motivated by Wegman et al to modify the outlet passage of Welch et al to have a funnel shape in order to achieve an anti-drizzle effect.

3. Even if Welch et al were modified according to the teachings of Wegman et al, the resulting structure would still not meet the limitations of the claims. The claims recite that the outlet of the powder passage of the base member has an opening area which is larger than an opening area of the passage of the outlet member adjacent the shutter. However, since the shutter or valve element 70 of Wegman et al is located at the topmost

surface of the “outlet member” 64, the opening area of the powder passage in the “base member” 62 at its outlet would be the same as – not larger than -- the opening area of the powder passage of the “outlet member” 64 adjacent the shutter 70, regardless of the presence or absence of a taper in the “outlet member” 64 at a location below the shutter or valve element. That is, regardless of whether the powder passage in the “base member” 62 or “outlet member” 64 is cylindrical or conical in Welch et al, since the shutter 70 is essentially at the joint between the “base member” 62 and the “outlet member” 64, the opening area of the powder passage of the base member will be the same as that of the opening area of the passage of the outlet member adjacent the shutter. Accordingly, even if one skilled in the art were indeed motivated to modify Welch et al in view of Terazawa et al and Wegman et al, the resulting structure would still not correspond to the claimed subject matter. The claims therefore define over any combination of Welch et al, Terazawa et al and Wegman et al.

The Examiner postulated during the interview that Welch et al would anticipate the claims if the fastener 40 thereof were considered the “base member” and the lower section thereof were considered the “outlet member.” However, there is no evidence in Welch et al that the fastener is “affixed” to the powder storing body, as opposed to being integral with the powder storing body.

Claim 12 further recites that the outlet member comprises a first part selectively connectable to the base member and a second part fittable to the first part and including the shutter, e.g., as in Figures 12-14. This has the advantage that the shutter may be inserted into the inner part 45 prior to packing the container with toner (paragraph bridging pages 23-24). There is no teaching or suggestion for this feature in any combination of Welch et al, Terazawa et al and Wegman et al.

Claims 8 and 9 were rejected under 35 U.S.C. § 103 as being obvious over Welch et al in view of Terazawa et al, and further in view of Beaufort et al and Wegman et al, wherein

Beaufort et al was further cited to teach the incorporation of the structure into a powder toner dispenser container. However, Beaufort et al nonetheless fails to overcome the shortcomings of Welch et al, Terazawa et al and Wegman et al, as discussed above, and so the claims define over any combination of the above references.

New dependent Claims 17-20 further recite that the shutter is cylindrical and is removably fitted in a transverse cylindrical shutter hole of the outlet member. This is not taught in the prior art.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Gregory J. Maier
Registration No. 25,599
Robert T. Pous
Registration No. 29,099
Attorneys of Record

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

I:\ATTY\RTP\242958US-REQ.DOC